

Title (en)

Apparatus and method for visual surface effect enhancement.

Title (de)

Vorrichtung und Verfahren zum Verbessern des visuellen Oberflächeneffekts.

Title (fr)

Installation et procédé pour l'amélioration de l'effet visuel de surface.

Publication

EP 0099639 A1 19840201 (EN)

Application

EP 83303382 A 19830610

Priority

- US 38762782 A 19820611
- US 43724082 A 19821028
- US 43724682 A 19821028

Abstract (en)

Method and apparatus for pressurized fluid stream treatment of the surface of a relatively moving textile substrate to impart visual surface changes, particularly controlled changes in visual contrast due to bubble formation within individual constituent fibers thereto. The apparatus includes a fluid discharge manifold 30 with discharge slot 32 disposed across the path of relative movement of the substrate to discharge pressurized heated fluid, such as air, in one or more narrow discrete streams into the surface of substrate 10. A temperature pre-conditioning means 2 to modify the temperature of the increasing substrate surface as well as a moisture pre-conditioning means 8 is positioned ahead of the discharge slot. Heated pressurized fluid streams strike the pre-conditioned surface of the substrate containing thermoplastic fibers which are at a pre-determined temperature and which have a controlled amount of moisture therein, causing the formation of light-reflecting bubbles within the fibers, which changes the appearance of areas of the fabric surface by enhancing the relative visual contrast level of the modified areas of the substrate compared with the untreated areas. The process may be repeated using different pre-conditioning values, resulting in areas which have a contrast level which is different from untreated and previously treated areas.

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D06C 23/04

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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